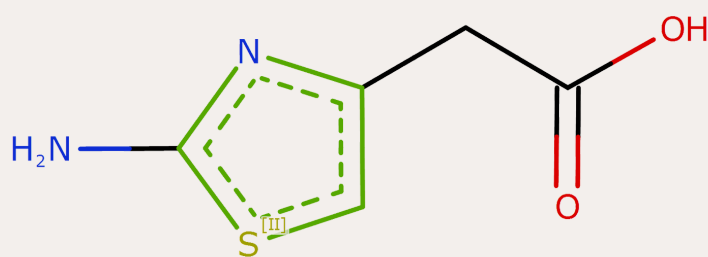


Resolving conflicting data sources to a single call in Sarah Nexus



The Sarah Nexus training set incorporates data from a **range of trusted sources**. Where data is conflicted for a compound, the overall call depends on data source priority listed below:

Overall Call: Negative
Similarity: 100%

Source: Member data
Dataset Call: Negative
Source activity call: Negative

Source: Vitic Summary Call Table
Dataset Call: Negative
Source activity call: Conflicted

Source: US Food and Drug Administration (FDA CFSAN)
Dataset Call: Negative
Source activity call: Positive

Source: Vitic NTP Table
Dataset Call: Negative
Source activity call: Equivocal

1. **Member data**
2. Acid halide mutagenicity dataset
3. Derek Nexus example compounds
4. Data points with strain information
5. Other sources

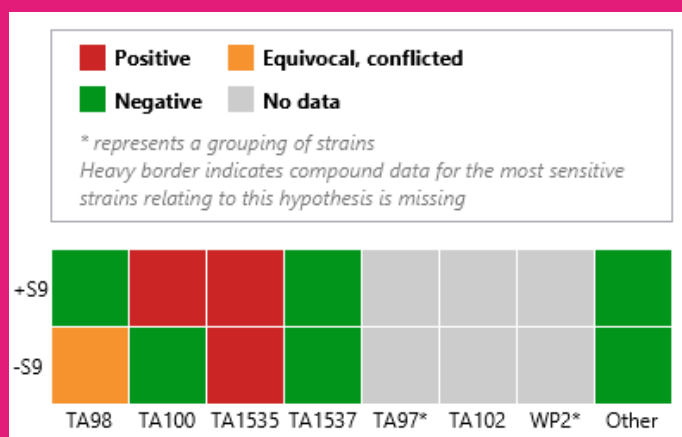
The user is presented with relevant information about each compound so that they can better understand the Sarah prediction, e.g. **references & activity** in specific strains in the Ames assay.

Overall call per strain

A strain profile is created for each compound that highlights the observed (in)activity when the compound is tested in each strain, with consideration of metabolic activation.

Conservative overall calls are generated for each strain as follows:

1. Contains any positive results = **Positive**
2. Contains any conflicted results = **Conflicted**
3. Contains any equivocal results = **Equivocal**
4. Contains only negative results = **Negative**



TA97* = TA97a and TA97.
WP2* = WP2 uvrA/pKM101, WP2 uvrA, WP2 and other E.coli strains.
Other = TA102, TA104, TA92, TA1978 etc.

No. of unique compounds used in the Sarah model

12,195

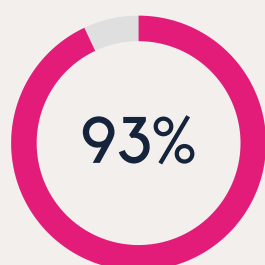
No. of compounds with Positive activity

5,814

No. of compounds with Negative activity

6,381

0 2,500 5,000 7,500 10,000 12,500



Agree

93% of all sources agree, where a compound has more than one source



- Number of sources used to provide data for compounds = **43,676**
- Average number of sources per compound = **3.58**

[Find out more about Sarah Nexus on our website](#)

[Request a free Sarah Nexus demonstration here](#)